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| 09/876,793 | 06/07/2001 | Kang Soo Seo | 46500-000610/US | 9026 |
| 30593 7590 06/23/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195 | | | | |
| EXAMINER SHELEHEDA, JAMES R | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/876,793

Applicant(s)

SEO ET AL.

Examiner

JAMES SHELEHEDA

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20, 22, 25-27 and 30-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20, 22, 25-27 and 30-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/11/07 have been fully considered but are not persuasive.

On pages 9-10, of applicant's response, applicant argues that Takahashi fails to disclose wherein each thumbnail picture is stored as a block of menu data on the computer readable medium, as the thumbnails are not stored as a "block of menu data" but rather in disparate, plural positions-not the same menu data block.

In response, it is noted that the claims merely require that each thumbnail picture be stored as a block of menu data.

Thus, as Takahashi discloses wherein the thumbnails are part of the displayed menu, they qualify as "menu data". Further, each individual recorded picture qualifies as a "block" of data, consisting of numerous bits of digital information grouped together to form a single data block consisting of a digital image.

The claims do not require all of the pictures to be recorded together in the same data block as applicant suggests, merely that each *individual* picture be stored as a block of data.

Thus, each individual thumbnail is stored as a block of menu data, and all of the storage area locations containing the thumbnail images qualifies as the "menu data storing area".

Therefore, applicant's arguments are not convincing.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 20, 25-27, 30-33, 35-37, 39-41, 43-45 and 47-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al. (Takahashi) (6,483,983) (of record).

As to Claim 20, Takahashi discloses a computer readable medium having a data structure for managing reproduction of menu data, comprising:

a video data storing area storing one or more playback units of video data (disk area dedicated to storing recorded video; column 9, lines 18-31 and lines 52-61);

a menu data storing area storing menu data comprising one or more thumbnail pictures corresponding to each playback units (thumbnails also recorded on the disk; column 12, lines 7-62), each thumbnail stored as a block of menu data on the computer readable medium (picture array menu; column 2, lines 32-54 and column 9, lines 8-51 and column 12, lines 32-56); and

a menu management area storing menu management information, the menu management information providing an index to menu data (column 9, lines 8-51 and column 12, lines 20-23 and 49-56),

wherein at least one thumbnail in the menu data is reproduced based on the menu management information (column 5, line 21-column 7, line 7).

Claims 30-33 correspond to Claim 20. Thus, each is analyzed and rejected as previously discussed. (**Note:** the "optical pickup" and "controller" components to read/write data of claims 31 and 33 are disclosed at column 3, line 63-column 4, line 33, column 7, lines 50-57 and column 9, lines 22-31).

As to claims 25, 35, 39, 43 and 47, Takahashi discloses wherein the controller is configured to control recording the menu management information (recording the menu data on the disk; column 5, line 21-column 7, line 16, column 9, lines 36-51 and column 12, lines 7-57), the menu management information indicating a number of reduced pictures stored in the menu data area (wherein each movie has a defined and numbered listing of pictures associated with it; see Fig. 3; column 5, line 21-column 7, line 16, column 9, lines 36-51 and column 12, lines 7-57).

As to claims 26, 36, 40, 44 and 48, Takahashi further teaches the use of "head indexing," a well-known technique in video reproduction. Head indexing is a process by which addresses are attached to various frames in a data stream, thereby providing

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quick access to desired frames (i.e., the reduced pictures) in the picture array. (Col. 1, Ln. 27-44). Takahashi discloses wherein the controller is configured to control recording the menu management information (recording the menu data on the disk; column 5, line 21-column 7, line 16, column 9, lines 36-51 and column 12, lines 7-57) which provides a starting address of a frame displayed in the array, this address would, in essence, be a starting and ending address since a "frame" is a defined point (i.e., beginning and end) in the data stream. Following this logic, it would be inherent that the addresses (i.e., frames) indicate the number of frames stored on the DVD. Accordingly, Takahashi anticipates each and every limitation of Claim 26.

As to claims 27, 37, 41, 45 and 49, since each frame (i.e., thumbnail) in the array has a corresponding address identifier, it is inherent the array include said starting addresses. Accordingly, Takahashi anticipates each and every limitation of Claim 27.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 22, 34, 38, 42, 46 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of Chen et al. (Chen) (5,917,830) (of record).

As to claims 22, 34, 38, 42, 46 and 50, as indicated above, Takahashi anticipates each and every claim limitation except wherein the menu data area records padding data between at least two of the blocks of menu data. However, within the same field of endeavor, Chen discloses a similar system wherein null packets are inserted (i.e., appended) into the video stream for the purpose of preventing buffer overload. (Abstract; Col. 2, Ln. 40-54). The exact placement of such null packets is obvious and a matter of simple design choice. Accordingly, it would have been obvious to one of ordinary skill in this art at the time of Applicant's invention to combine the systems of Takahashi and Chen in order to prevent RAM buffer overload through utilizing null data packets appended to each menu picture data.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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7. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on _____.
(Date)

Typed or printed name of person signing this certificate:

Signature: _____

Registration Number: _____

Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. () _____ - _____ on _____.
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Typed or printed name of person signing this certificate:

Signature: _____

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES SHELEHEDA whose telephone number is (571)272-7357. The examiner can normally be reached on Monday - Friday, 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James Sheleheda
Examiner, Art Unit 2623

JS

/Chris Kelley/
Supervisory Patent Examiner, Art Unit 2623